Board of Commissioners
Earl Pugh, Jr., Chair
Shannon Swindelll, Vice-Chair
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COUNTY OF HYDE

30 Oyster Creek Road PO Box 188 SWAN QUARTER, NORTH CAROLINA 27885 252-926-4400 252-926-3701 Fax Kris Cahoon Noble County Manager

> Franz Holscher County Attorney

Lois Stotesberry, CMC, NCCCC Clerk to the Board



Heather Jennings
Albemarle-Pamlico National Estuary Partnership
Program Manager
1601 Mail Service Center,
Raleigh NC, 27699-1601

Dear Ms. Jennings,

Hyde County is pleased and excited to submit our project proposal, "Machapunga Haven - Building a Hyde Healthy Habitat" to the Albemarle-Pamlico Estuary Partnership for funding. I believe this project has great potential to mitigate resource concerns while also educating and engaging the community.

This partnership between Hyde County Soil & Water, the Hyde County Health Department and APNEP will take a highly public area in our community from a problem area to a beautiful and educational feature that will not only do its part protecting our environment and eliminating the unsightly erosion caused by stormwater runoff, but will also inspire and educate others on the benefits of effective stormwater management and pollinator gardens.

Machapunga Haven will inspire so many user groups including employees, clients, community members, our children and all those that visit. The garden will attract more citizens to our surrounding walking trails not only promoting healthy living and exercise but community engagement. I have also heard that our local bees and butterflies are particularly excited about the project!

Please accept our application and sincere appreciation for the opportunity to apply. Our Hyde County has the capacity, knowledge and experience to make this opportunity shine and there is no doubt that this will be very successful and well received by our community. Again, thank you for the work you all do at APNEP. It is greatly appreciated.

Troble

Sincerely,

Kris Cahoon Noble Hyde County Manager



North Carolina Department of Environmental Quality Contact Heather Jennings at (919) 707-8632 for questions

1. Project Title	Machapun	ga Haven - Building a Hyd	de Healthy Habitat		
2a. Primary Con	tact or Proj	ect Manager¹			
Name		Deborah P. Cahoon			
Title District Administrator for Hyde Soil & Wat			Hyde Soil & Water Conse	ervation District	
Organization Nam	е	Hyde County			
Organization Tax I	D Number	56-6000308			
E-mail address		dcahoon@hydecountyne	c.gov	6	
Mailing Address		P. O. Box 264			
City		Swan Quarter	State NC	Zip 27885	
Telephone		252-926-4195	Fax Number	252-926-3701	

¹ A paragraph or Statement of Qualifications must be provided in Section 4 of the application form to confirm that anyone designing, installing, or monitoring the proposed project is qualified to do so.

Name	Deborah P. Cahoon		
Title	District Administrator for	Hyde Soil & Water Cons	ervation District
Organization Name	Hyde County		
E-mail Address	dcahoon@hydecountyne	c.gov	
Mailing Address	P. O. Box 264		
	Swan Quarter	NC	27885
City		State	Zip
Telephone	252-926-4195	Fax Number	252-926-3701
Federal Tax ID Number	56-6000308		

2c. Payment Address (where invoice payments will	be mailed)	
Name	Deborah P. Cahoon		
Title	District Administrator for I	Hyde Soil & Water Conser	vation District
Organization Name	Hyde County		
E-mail Address	dcahoon@hydecountync.	gov	
Mailing Address	P. O. Box 264		_
City	Swan Quarter	State NC	Zip 27885
Telephone	252-926-4195	Fax Number	252-926-3701



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3. Project Description (provide a short summary of the project).

Machapunga Haven - Building A Hyde Healthy Habitat

The Hyde County Health Department and the Hyde Soil and Water Conservation District (SWCD) are interested in addressing a resource concern and increasing public engagement at the county's health office complex and existing public walking path in Swan Quarter by creating a rain garden learning exhibit.

Currently, the Hyde Health Department is experiencing an issue with stormwater roof runoff eroding a section of their main office complex. Hyde SWCD sees an opportunity to correct site erosion by installing rain gutter downspout splash blocks at gutter sites, re-grading the eroded area to appropriately route flow, and installing an approximately 5 by 10-foot pollinator rain garden on both sides of the sidewalk that receive stormwater flow from a portion of the roof. The pollinator garden install would follow a Coastal Institutes Pollinator Friendly Border landscape design, which can be found at: go.ncsu.edu/CoastalLandscapes.

While wanting to address their erosion issues, the Hyde County Health Department is also actively looking for additional ways to engage and educate visitors and clients to their complex and pedestrians using an existing public walking trail that loops around health offices. Health Department leadership are interested in making the proposed rain garden a learning and relaxation space to better engage with visitors and clients, encourage use of the existing walking trail, and improve health, happiness, and well-being on site by all (employees, visitors, clients, pedestrians, etc.).

To meet this engagement objective, Hyde SWCD proposes to install benches on site and educational signage identifying the pollinator garden, displaying plant identification information, and conveying the intended purpose and value of the garden to environmental and public health. Signage would be designed to enhance visitors' knowledge of the Tar-Pamlico watershed, nonpoint source pollution issues, and the importance of pollinators and rain gardens and to encourage use of the existing walking trail on site to build healthy exercise habits among employees, visitors, clients, and pedestrians interacting with the site. Hyde SWCD also proposes to involve 15 youth (grades 3rd – 5th) part of the Hyde County 4H Juvenile Crime Prevention Council (JCPC) program in the installation of the pollinator rain garden as part of an interactive learning program. Youth involved in installation will be taught about the Tar-Pamlico watershed, pollution issues and health advisories in the watershed, native pollinators, and healthy foods. Through this project students are provided an opportunity to apply learned content and improve community resources; solid building blocks to instilling good stewardship and civic engagement habits among participants beyond the project period.

The Hyde Health Department anticipates showcasing the rain garden at the biannual Health Fairs it holds for students and the community and locating outdoor learning stations near the garden for partners to use to engage and educate the public. Partners will participate in at least one Health Fair in the project period (October 2021 – June 2022). At these events, partner and health staff will provide outreach on organization missions, programs, and environmental and public health topics including pollinator restoration, nonpoint source pollution and human health advisories, value of rain gardens and other best management practices, and the importance of building good health and stewardship habits.

4. Statement of qualifications (provide a brief explanation of your organization's qualifications to complete the project)



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Hyde Soil and Water Conservation District (SWCD): Soil and Water Conservation Districts (SWCDs) were formed nationwide from enabling legislation passed by Congress to address critical conservation problems of the 1930s. Today, Hyde SWCD continues to assist landowners and users in sustainably managing soil, water, plants and wildlife and by providing both educational and technical assistance in addressing resource concerns as well as financial assistance through state and federal cost share programs and grants. Hyde SWCD is staffed by a cost share technician, Cruise Gibbs, and a senior administrator and department head, Debbie Cahoon. Gibbs holds a Bachelor of Science Degree in Environmental Health and Safety, has completed Nutrient Management Training and RUSLE Plat training, and will oversee the installation of the pollinator rain garden. Gibbs can also draw technical assistance from the North Carolina Division of Soil & Water Conservation in design and installation of the rain garden if needed. Cahoon's tenure with the district began in 2003 and in that time she has administered several grants and gained ample experience organizing and delivering environmental education programming. Hyde SWCD staff adapted and routinely deliver a pollinator program to be featured in this project entitled, "Where Would We BEE without Pollinators," which was originally created by the National Association of Conservation Districts. Additionally, Hyde SWCD annually facilitates environmental education field days, organizes soil and water conservation poster contests for 3rd-5th graders. and supports middle and high school teams from the county compete at the Coastal Envirothon and NC Envirothon competitions.

Hyde County Inspections & Maintenance: Building & Maintenance Inspector, Rumley Everett will assist in installation of the pollinator rain garden. Everett has over 15 years of experience working with contractors and has been serving as the Building Maintenance Inspector for Hyde County for two years.

Hyde County 4-H: Hyde County has a well-established 4H program that engages youth in summer camps and year-round programming. The Extension Agent supporting this project, Lee Brimmage has a Master's Degree in Parks, Recreation Sports & Tourism Management and has been serving as the 4-H Youth Development Agent for Hyde County for seven years. He has created and routinely delivers two pollinator programs entitled, "Winged Wonders" and "Hive Helpers" that will be delivered to students engaged with this project.

Hyde Health Department: Health Department Director, Luana Gibbs, and staff will help facilitate this project. Hyde County Maintenance contractors that provide lawn care to the office complex will provide assistance in maintaining the pollinator rain garden installation on Health Department property.

5. Project Start Date	October 2021	Project End Date	June 2022	
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18 Column 18 1 (19 Column - Column 18 Column 1	h take place within or primarily impact areas in APNEP's onsidered for funding.
Project Location	Conservation Habits – Building a Hyde Healthy Habitat
River Basin(s)	Tar-Pamlico
Position coordinates of project location	Latitude: 35.420216
	Longitude: 76.319066



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7. List which CCMP Actions will be addressed and how the proposed activity will address them:

Link to APNEP Comprehensive Conservation and Management Plan (CCMP)

The main CCMP Actions that the project, "Machapunga Haven - Building a Hyde Healthy Habitat", will address are Components D1 .1, D1.2, D1 .5, D2.3.

- Action D1 .1 Communicating the importance of stewardship and offer opportunities for volunteerism to further APNEP's mission
 - o In the proposed project, 15 students in the Hyde County 4-H Juvenile Crime Prevention Council program will receive environmental lessons on the Tar-Pamlico watershed, stewardship behavior, and the importance of pollinators to ecosystems and human health. Lessons on healthy eating and exercise will also be delivered and connect with the environmental education programming delivered. Students will be able to apply lesson content by assisting with installation of the pollinator rain garden at the proposed site on Hyde County Health Department property. Facilitating student involvement in a local environmental community improvement project can promote building of good stewardship and volunteerism habits among participants.
- Action D1.2: Facilitate efforts to improve collaborations to protect and restore ecosystem processes
 - The project leader, Hyde SWCD, and project partner, NC Cooperative Extension Service, primarily work to assist landowners and users including homeowners, farmers, and foresters (among others) in addressing resource issues and other concerns on privately owned land through practice implementation and education. The direct outreach efforts proposed in this project, the youth environmental and health programming and outreach at the Health Department's biannual Health Fairs, will offer these organizations additional opportunities to collaborate between agencies and interact with students and members of the public to share technical environmental expertise and market existing financial assistance programs to address water quality resource concerns. Hyde SWCD and NC Cooperative Extension will encourage all individuals they interact with to seek assistance from the SWCD and Extension service on opportunities to implement conservation best management practices to protect, restore, and enhance watershed health in the Tar-Pamlico basin. Showcasing an installed best management practice to the public, will enhance environmental messaging delivered through all proposed programming.
- Action D1 .5 Increasing opportunities for public access to waterways, public lands, and trails
 - An existing 0.28mile public walking loop trail surrounds the Health Department complex. Installing a pollinator rain garden learning exhibit on site as part of this project will help the Department to engage visitors, clients, and employees with the existing walking path and encourage its use. The pollinator rain garden, with benches and flowering native plants, will also serve as a beautiful relaxation point along the walking loop for visitors, pedestrians, and health department employees to enjoy and connect with the outdoors.
- Action D2.3 Increasing public understanding of the relationship between ecosystem health and human health advisories relating to water, fish, and game
 - The proposed pollinator rain garden installation will include signage designed to convey the synergy between environmental and human health to visitors. Signage will specifically display information on the benefits of native pollinator communities to environmental and human health, current nonpoint source pollution issues due to human activity in the Tar-Pamlico watershed and the health advisories resulting from pollution, value of rain gardens, and good stewardship, nutrition, and exercise habits all users can practice to improve



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environmental and public health in Hyde County. Additionally, if funded, the Health Department plans to showcase the project at the biannual Health Fairs it hosts for community members. NC Cooperative Extension, and Hyde SWCD will be invited to participate in the annual health outreach events. Outdoor resource stations for each participating partner will be set up near the proposed rain garden site and partners will be encouraged to educate Health Fair visitors on each agency's mission and goals in addition to providing information on how pollinator and watershed health simultaneously promotes public health.
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8. Brief explanation of linkage to APNEP priority areas (1)water quality, (2)submerged aquatic vegetation, (3)coastal habitats, (4)increasing resiliency:

The Machapunga Haven - Building a Hyde Healthy Habitat has a direct linkage to the APNEP increasing resiliency priority and an indirect link to coastal habitats priority. This project will increase resiliency of communities and ecosystems in the Tar-Pamlico River Basin by providing additional habitat for pollinators and birds to thrive and educating students and landowners and users about the Tar-Pamlico watershed, nonpoint source pollution, human health advisories, pollinator importance to ecosystem and human health, and good stewardship practices. Pollination and wildlife interactions with native pollinator plants established through this project (e.g. birds dispersing seeds through fecal matter) can increase additional pollinator habitat establishment thereby helping improve coastal habitat. Additionally, slowing partial roof runoff flow from the Hyde County Department of Health office building by implementing gutter splash blocks and appropriately routing water to a well vegetated landscaped area with good drainage provides modest sediment loss reductions and water quality benefits.

9. List activities that will be used to monitor or indicate the success of the proposed activity/project by listing one or more output and/or outcome metrics that will be measured, documented, and reported after project completion, as well as the expected target for each metric. Please also include a short explanation for how each listed metric assists in measurement of a CCMP Action being implemented by the project. Please see the proposal guidelines RFP output/outcome example document for details.



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Output metrics:

- Partnerships and Leveraged Resources:
 - Three organizations will be involved in this project: Hyde Soil and Water Conservation District (SWCD), Hyde County Health Department, and the Hyde County Cooperative Extension Service. Two staff members (one administrator and educator and one technician) from Hyde SWCD will oversee project implementation. One agent from Hyde County Cooperative Extension (4-H Youth Development) will contribute to program and outreach delivery at the rain garden installation workshop with 4-H JCPC youth and at the Department Health Fair. One staff member from Hyde County Health Department will oversee project implementation.
 - CCMP Action Measurement Explanation: Identifying and reporting partnership structure and partner involvement and contributions can be useful in measuring success in:
 - 1. Developing relevant cross-discipline messaging (importance of stewardship (D1.1), the relationship between environmental health and human health (D2.3))
 - 2. Facilitating successful collaboration (between government agencies and departments (D1.2)).
 - Hyde County Health Department will contribute \$250 in cash funding for project implementation. Beyond the project duration, the Health Department intends to support maintenance of this rain garden. Although no formal agreement has been drafted, the Health Department has included a letter of support and intent. Additionally, in-kind grading equipment as well as hand and power tools, rakes, and gardening tools for at least 20 individuals will be provided by partners for project implementation. All partner contributions will be tracked and reported back to APNEP at the project conclusion.
 - CCMP Action Measurement Explanation: If funded, tracking actual partner contributions to the proposed project can help determine project performance and stated implementation goals of CCMP Action D1.2. Quantifying partner involvement and contributions can be used to measure how successful project implementation was in facilitating successful collaboration (among government agencies (D1.2)).

In-person Outreach and Engagement:

- One 8 hour workshop with watershed, nonpoint source pollution, pollinator, and healthy food and nutrition programming will be delivered to fifteen 4-H students involved in the Juvenile Crime Prevention Council program in Spring of 2022. Pre and post surveys will be utilized to assess knowledge gained through the workshop and participant satisfaction with the overall event and final product. Program assessment results can be reported to APNEP at the project conclusion.
 - CCMP Action Measurement Explanation: The proposed workshop helps to measure implementation of CCMP Actions D1.1, D1.2, D1.5, and D2.3. Quantifying workshop reach (number of participants) and contact time (program length), and collecting self-reported qualitative information on participant knowledge gain, satisfaction, and behavior change intent, can be used to measure how successful the workshop was in:



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- Communicating relevant messaging (importance of stewardship (D1.1), the relationship between environmental health and human health (D2.3));
- 2. Providing meaningful engagement (quality volunteering opportunity (D1.1); increasing exposure to public land and trails (D1.5)):
- 3. Facilitating successful collaboration (among private individuals and students and between government agencies (D1.2));
- 4. Improving community interest and sense of ownership over shared community resources (public walking trail (D1.5)).
- O Hyde SWCD and Hyde County Cooperative Extension will participate in at least one Hyde County Health Fair (Spring 2022) to deliver programming to Hyde County residents. The target audience of this event is Hyde County residents from all walks of life and backgrounds. Hyde SWCD anticipates at least 70 individuals will be engaged during the event. Staff will attempt to track the number of individuals they provide outreach to throughout the fair. Overall Health Fair attendance numbers can be reported to APNEP at project close.
 - CCMP Action Measurement Explanation: The proposed outreach helps to measure implementation of CCMP Actions D1.1, D1.2, D1.5, and D2.3.
 Quantifying event reach (number of participants engaged) can be used to measure how successful the workshop was in:
 - Communicating relevant messaging to a wide audience (importance of stewardship (D1.1), the relationship between environmental health and human health (D2.3)); and fostering community interest and ownership over an enhanced public resource (improvements to walking trail aesthetics (D1.5));
 - 2. Providing engagement with shared resources (increasing exposure to public land and trails (D1.5)); and
 - 3. Facilitating successful collaboration (among private individuals and students and between government agencies (D1.2)).

Additionally, several information signs will be installed as part of the pollinator rain garden installation. It will not be possible to provide a quantitative report on the number of visitors, pedestrians, clients, and employees indirectly reached with signage during this project's duration. As a result, measurement of the success of signage to communicate relevant messaging (stewardship importance (D1.1) and relationships between environmental and public health (D2.3)) and to increase public knowledge of the public walking trail on site (D1.5) will not be recorded for this project. Nevertheless, it should be noted this is an additional expected project output that will further APNEP's mission and goals. It may be possible to gather qualitative information from health department staff on whether employees are seeing greater traffic on the walking path or receiving positive feedback from Health Department clients and visitors on the pollinator rain garden installation. If this information can be gathered and compiled, it will be reported to APNEP at project close.



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10. Description of funds (Combined APNEP and leveraged funds.	EP and lev	eraged funds.		
Description of Service	APNEP	Contract Applicant (Cash, In-Kind, Other) (e.g. In-kind - staff assistance 5hrs/wk*\$13/hr*10wks=\$650)	Other Contributions (Organization, Cash, In-Kind, Other) (e.g. NC DMF - In-kind – staff assistance 5hrs/wk*\$13/hr*10wks=\$650)	Total
Personnel/Salary		In-Kind – Staff assistance 10hrs/wk*\$30/hr*8 wks=\$2,400	County of Hyde In-Kind-staff assistance 20hrs/wk*\$25/hr*wk*3ppl=\$1500.00 Hyde Health Department- In-kind -staff assistance 5hrs/wk*\$25/hr*8wk* 2	\$5,900
Fringe Benefits				
Project Supplies	\$2,500		Hyde Health Department – Cash Signage & Irrigation \$250.00 10% match	\$2750
Equipment		Other – grading equipment, hand/power tools, rakes, gardening tools In-Kind		\$500
Transportation/Travel		Other – Truck fuel for supply pick-ups In-Kind \$250		\$250
Sub-contract Services				
Other Direct Costs				
Total Direct Cost				
*Indirect Cost (F&A) (not to exceed 10%) (e.g. 10% of the total direct costs \$10,000 = \$1,000)				
Total Cost	\$2500	\$3,150	\$3,750	\$9,400



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11. Describe leveraging of funds from project partners (Optional):	
10% Matching Funds from the Hyde Health Department (\$250.00)	

12. Project Partners	(may add more if needed)				
Agency Name	Hyde County Health Department				
Agency Address	1151 Main Street, Swan Quarter, North Carolina 27885				
Role/contribution to Project	10% Matching funds \$250.00/ Host Annual Health Fair/Assist with implementation of project				
Contact Person	Luana Gibbs, Health Director Phone No. 252-926-4387				
E-mail address	lgibbs@hydehealth.com				
Agency Name	Hyde County 4-H Program/Juvenile Crin	ne Prevention	Council Program		
Agency Name Agency Address	Hyde County 4-H Program/Juvenile Crin Hyde Gov't Center, Suite 117 30 Oyster Carolina 27885				
	Hyde Gov't Center, Suite 117 30 Oyster	Creek Road,	Swan Quarter, North		
Agency Address Role/contribution to	Hyde Gov't Center, Suite 117 30 Oyster Carolina 27885	Creek Road,	Swan Quarter, North		

13. Project Milestone	e Schedule
Time Period / Date	Activities (List specific outputs or activities that will be achieved during each quarter.)
First Quarter	Site & Prep Work
Second Quarter	Order & Purchase Materials
Third Quarter	Purchase Pollinator Plants
Fourth Quarter	Installation of Garden, Signage & Interactive Educational Activities for Students

Note: All projects must submit a detailed <u>Final Project Report</u> that is due by the end of the contract for APNEP review and approval. Supplemental information should include (when relevant) a file containing data



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collected during the project, GIS Data, brochures, outreach tools, photographs or videos taken during the project, and a summary of survey results.

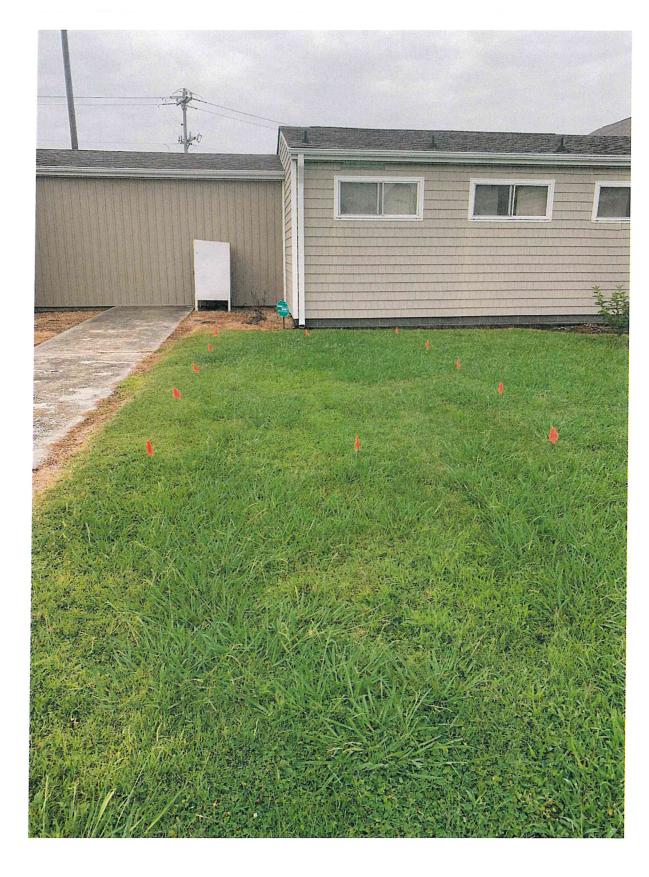
14. References and Literature Cited (in	if applicable)	
See Attached Documents for Referen	nce	





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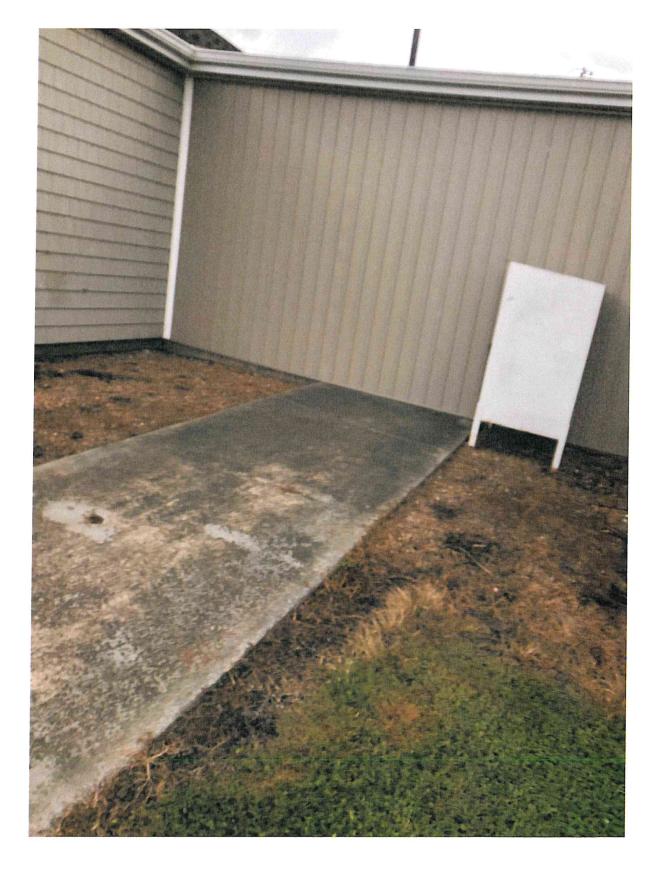
















Supply/material	Qty	Unit Cost	Total
Landscaping Timber (3"x4"x8") Rebar (1/2" x 20") Landscape Fabric (4'x50' roll) Landscape Fabric (4'x100' roll) Landscape Fabric Pins (75-pack) Top soil (yd^3) Butterfly Bush Sweet Pepperbush Buttefly Weed Blue wild indigo Purple coneflower		48 \$8.00 6 \$11.50 1 \$ 30.00 1 \$ 55.00 4 \$ 12.00 10 \$ 35.00	300
Red coneflower Orange coneflower			
Sand coreopsis			
Eastern smooth beardtongue			\$600
Signage Bench Gutter diversion 45 elbow Gutter Splash Block Pebbles (7/8 white river rock) (yd^3) Irrigation		1 \$ 600.00 4 \$ 7.00 4 \$ 20.00 2.5 \$ 200.00	\$600 \$28 \$80 \$500

\$2,744

Grand Total

		Plant Signs		
E-Mail:	1384 S 700 W, Phone: E-Mail: Sales@plantsigns.com	1384 S 700 W, Springville, UT 84663 Phone: (801) 900-1182 antsigns.com Web Page: http://www.plantsigns.com	,plantsigns.com	
ENC	RAVED PLAN	15	VVOICE	
Name: Rol	Robert McCleidon	" Les Die Die	Date: 4/18/19	
Org2	tion: UNC CAUSTAL	States tas		
- 4	850 NC 345	5)		
City, State, Zip:	Wanchese	Nc . 27481		
282	475-5407 Ext:	Cell		
EMail:				
QUANTITY SIZE	COLORSTAKE TYPE	PE PRICE EACH	TOTAL PRICE	
1	Black	9,43	198.60	
20 3x5-17	tyde & Stakes	ces 2.97	59.10	
201-	Accem One-1.7	+ Discourt	- 25.80	
VISA, MasterCard or American Express:	American Express:	Material Subtotal:	232.20	
Name on Card:		Sales Tax (State=_):		
Card No:		Shipping:	28.23	
Exp. Date: Sign	Signature Code:	1		
Card Billing Address:				
Street:		Total Due:	260,43	
City:				
State: Zip:		Balance Due:		
Notes:		Including this or	Including this order, you have bought a	
		total of 450	450 signs/stakes. Therefore	
		The quantity disc	The quantity discount is determined by the total	_
		# of signs/stakes order 0-49 signs= no discount	# of signs/stakes ordered from all your orders. 0.49 signs=nodiscount 250,499 signs= 150.	_
		\$0-99 signs = 5%	=	_
		10% 10%	, w	=